MEMORANDUM

TO: Mylla O'Dell

FROM: George Kuiawa

DATE: July 2, 1984

SUBJECT: Cancel Job #1167

The purpose of this memorandum is to inform you of the need to cancel job #1167 - Remove 6000 gallons of PCB Oil. The job has not been authorized.

Thank you for your prompt attention. If you have questions, please call me at ext. 8804.

GJK/csn7A4
c: J. McArthur
D. McCaig

6-26-84
Called D. Kuiawa re: above note. He said he would follow up & get back to me
PMP

5-29-84
"Original" sent to W Higgins for cancellation
GJK

Portland General Electric Company

ES-730-87L
GEN A/S 7
April 30, 1987

Mr. John R. Funderburk, III
Hart Crowser & Associates, Inc.
1910 Fairview Ave E.
Seattle WA 98102-3699

Dear Mr. Funderburk:

Subject: OMSI Station L Property

Enclosed are the minutes from the March 31, 1987 meeting with long-term, present, and retired employees of Portland General Electric that worked at Station L. A marked-up copy of the Station L drawing is also included, which denotes possible spill locations indicated by those attending at the meeting. Based on the information obtained at that meeting, our sampling activities have been expanded to incorporate those areas where oil containing PCBs could have been spilled.

If you have any questions on the information transmitted, please contact me at (503) 226-5661.

Sincerely,

Dennis M. Norton, Supervisor
Environmental Sciences

DMN:bjp
es.1050

Enclosures

c: Rick Hess, no enclosures
Fred Lamoureaux, no enclosures
Dave Larsen, no enclosures
Dorothy Rothrock, no enclosures

MEMORANDUM

TO: R. J. Hess
D. M. Norton
G. L. Normine
D. D. Irvin
L. J. Catto
J. W. Ream
L. G. Wihtol

FROM: Duncan McCaig

DATE: April 27, 1987

SUBJECT: Station L PCB Meeting Minutes

Attached are the minutes of our March 31 meeting with the retirees regarding Station L PCBs. I have included Dennis Norton's marked-up drawing that identifies possible oil spill locations. I have also sent a copy of the minutes to each retiree, thanking them for their participation and asking for comments. You will find a sample memo attached.

FDM/csn/4A24
Attachments
c: F. H. Lamoureaux w/attachments
G. M. Hutcherson "

STATION L PCB MEETING
EM&C
MARCH 31, 1987

Attendees: Duncan McCaig, EM&C
Roland Kitching, Retired EM&C
Harry Randall, NESCO
Rick Hess, Environmental Sciences
George Normine, EM&C
Roy Strecker, Retired EM&C
Daryl Irvin, Storeroom 62
Stan Danill, Retired EM&C
Lee Sherban, Retired EM&C
Bud Catto, Pelton/Round Butte
Dick Tucker, Retired EM&C
Dennis Norton, Environmental Sciences
Lavinia Wihtol, Legal
Jim Ream, System Planning & Engineering

Duncan McCaig opened the meeting by stating there was no need to prepare affidavits of the meeting as indicated in previous conversations. He then stated that PGE is attempting to clean up the Station L property from Grant Street to Market Street. The south property line will extend through the helipad and the middle of the wood storage building. This entire area has been donated to OMSI. It includes the storage yard, Station L plant, various buildings, and the garage, but excludes Stephens Substation. Duncan told those present at the meeting that PGE was committed to vacating the property by June 1, 1988 and is attempting to clean up the PCBs this summer during the dry weather period. He stated the purpose of the meeting was to identify, to the best of everyone's ability, areas where oil-filled equipment may have been stored and areas of possible spillage. By doing so, it will not be necessary to sample the entire yard for PCBs.

Dennis Norton reviewed on a drawing of Station L the areas where tests for PCB-contaminated oil spills have been conducted. The Red Zone, where capacitors had been stored in the past and the storage tank area have been sampled extensively. They have also excavated soil in the Red Zone, but the winter rains prevented them from doing further work, as they cannot dispose of PCB-contaminated soil that contains free liquid. He said they are now trying to locate leaks from equipment previously stored or operated in other parts of the yard. The asphalt has been tested at numerous locations, including near transformers in the Blue and Orange Zones. They also tested soil under the asphalt. In the Blue and Orange Zones, they found locations with very low PCB content in the asphalt, but the soil underneath the asphalt was contaminated with PCBs from oil spills before the asphalt was put in.

The area south of Grant to the pole yard and the floors of the storage buildings have been tested. Dennis said they had taken solid surface wipe tests of the oil stains in the Lincoln and Turbine Buildings. An area north of the helipad, part of Stephens Substation, and the area behind the Turbine Building have also been tested. Dennis said if they sampled the entire yard to find a one-foot-diameter spill, it would require approximately one and a half million samples, costing more than $60 per sample.

Duncan McCaig said they have tested the oil-filled equipment in the yard and have discovered that most of the equipment has some PCBs, but contamination is generally low.

Roland Kitching thought the hoist (drag) houses had contained oil-filled equipment before being torn down. Harry Randall said they would have been about 8 feet under present street level. Dick Tucker thought someone from the Underground Department should be contacted for a location. George Normine then asked if anyone could identify on the drawing where the hoist (drag) houses were located. Harry Randall pointed them out.

It was mentioned there would be contamination where capacitors had been stored. The capacitors were stored in the Red Zone and just to the west of the Poulsen Building. This area has already been sampled for PCBs.

Lee Sherban pointed out that approximately 30 years ago, PGE had traded areas with PP&L. Most of this equipment was contaminated because PP&L had worked on askarel equipment, then oil equipment, and then did some flushing which mixed askarel residue and oil. PGE inherited this equipment, which was subsequently removed from service and located along Burma Road. A junkyard group came in and dismantled it. George Normine showed Lee on the drawing where along Burma Road (by the gate) they had found some concentration of PCBs. Lee told him they would find a considerable amount of contamination in that area. Duncan asked if the line of equipment extended along the fence of the substation. Lee said that he would have a look at the site.

Duncan asked if there were any other areas where capacitors were stored. Dick Tucker told him there was a row west of the wood storage building. (This location is now in the Blue Zone.) Lee Sherban stated that where these capacitors were stored and along the road would be good places to test.

Roland Kitching stated that the powerhouse may be a good place to test for PCBs. Bud Catto said the pit at the end of Turbine 4 had once been flooded with oil, and should be tested.

Roland Kitching asked how clean the yard needed to be before OMSI took possession. He was told the yard had to be as clean as possible, to the best of PGE's ability.

Dennis Norton said the known outfall areas had been tested and he would appreciate information on any other outfall areas. None was given.

George mentioned a well site on the property and wanted to know if anyone knew of any others. No one knew of any other wells.

Dennis Norton asked if anyone remembered any transformer fires or any equipment fires where oils may have been subjected to high temperatures. No one knew of any equipment fires.

Duncan McCaig asked the group to summarize the areas so far identified as past storage or equipment locations. They were as follows:

1. Both sides of the pipeline (approximately a 10-foot strip on either side) between Second and Third Avenues. Capacitors had been stored in this location.

2. All along the north side of Burma Road, between the substation entrance to the fenced EM&C yard. Old PP&L equipment had been dismantled in this area.

3. Fenced storage area used by EM&C to store transformers, breakers, regulators, and capacitors (now the Orange and Blue Zones).

The meeting attendees then toured the Station L Building and yard. When they returned, the following additional areas had been identified:

4. Along the south side of Burma Road and north of the old conveyor, across from Stephens Substation, where Harry Randall and Roland Kitching thought some transformers were stored during construction of the Central Service Center.

5. Harry Randall pointed out areas around the manholes of the Station L oil tanks where oil had been spilled while filling the tanks. Some of the oil used had been insulating oil.

6. Bud Catto pointed out the roadway where oil was used to control dust. This area included the drive space around Stephens Substation, and south and east of Station L.

7. Capacitors were included with the fill material buried 20-30 years ago in the center of the yard. They were buried at least 20 feet deep. Later, slabs of foundation concrete were

dumped on the surface of this area. Dennis Norton asked if the attendees felt there were just a few buried or a considerable number. The group was uncertain as to the number of buried capacitors.

8. Barrels of new transformer oil had been stored in the trestle north of Station L.

9. Four hoist (drag) houses had contained electrical equipment.

10. Transformers had been stored on the property next to the pole training yard. This is roughly on Second Avenue between Sherman and Caruthers.

11. Station L turbine room had been used to untank transformers on many occasions. Sumps No. 4 and 6, and the drains leading to them, should be checked. Two pits used for untanking should be checked.

According to the group, the large section of land south of Grant and west of Second Avenue has never been used to store oil-filled equipment. It has only been used for Store 62 materials such as cables and insulators.

Duncan McCaig asked the group whether the storage locations of PGE's equipment had changed in the past 10 years. The group said it had not.

Duncan McCaig said that inside the Station L Turbine Building Harry Randall had shown him the locations of the sumps, drains, and pits. He would show Dennis the locations so they can be tested for PCB contamination. Duncan McCaig mentioned that dozens of barrels filled with calcium chloride will be left for OMSI because they hold the floor down in high water.

George Normine asked whether anyone knew if oil had been stored in any of PGE's underground tanks. He was told that at various times there had been oil stored in at least one of those tanks. Roland Kitching said oil was poured in, and sometimes oil was spilled around the opening. Harry Randall said that some diesel oil had been mixed with transformer oil.

Stan Danill asked if the oil storage tank at the garage had been tested. George told him that it had because there had been some spills.

Dennis Norton summarized all of the information obtained from the group by marking up one of the drawings (CB380). Dennis is responsible for directing OMNI to sample the soil and concrete in all

of the areas identified by this group. The locations of possible contamination are as follows:

1. Fenced storage area used by EM&C (samples have already been taken).

2. "Red Zone" between Sherman, Second, and the pipeline (cleanup is in progress).

3. Second Avenue between Sherman and Caruthers.

4. Central yard area for some buried capacitors.

5. North and east side of Burma Road, including the roadway.

6. North side of the old conveyor.

7. Roadway to the east and south of the Station L complex.

8. Outfall (already sampled).

9. Both sides of the pipeline between Second and Third.

10. Around the four manhole covers of the oil storage tanks for Station L.

11. Station L turbine room: two sumps, two pits, and various drains to the sumps.

12. North end of the turbine room.

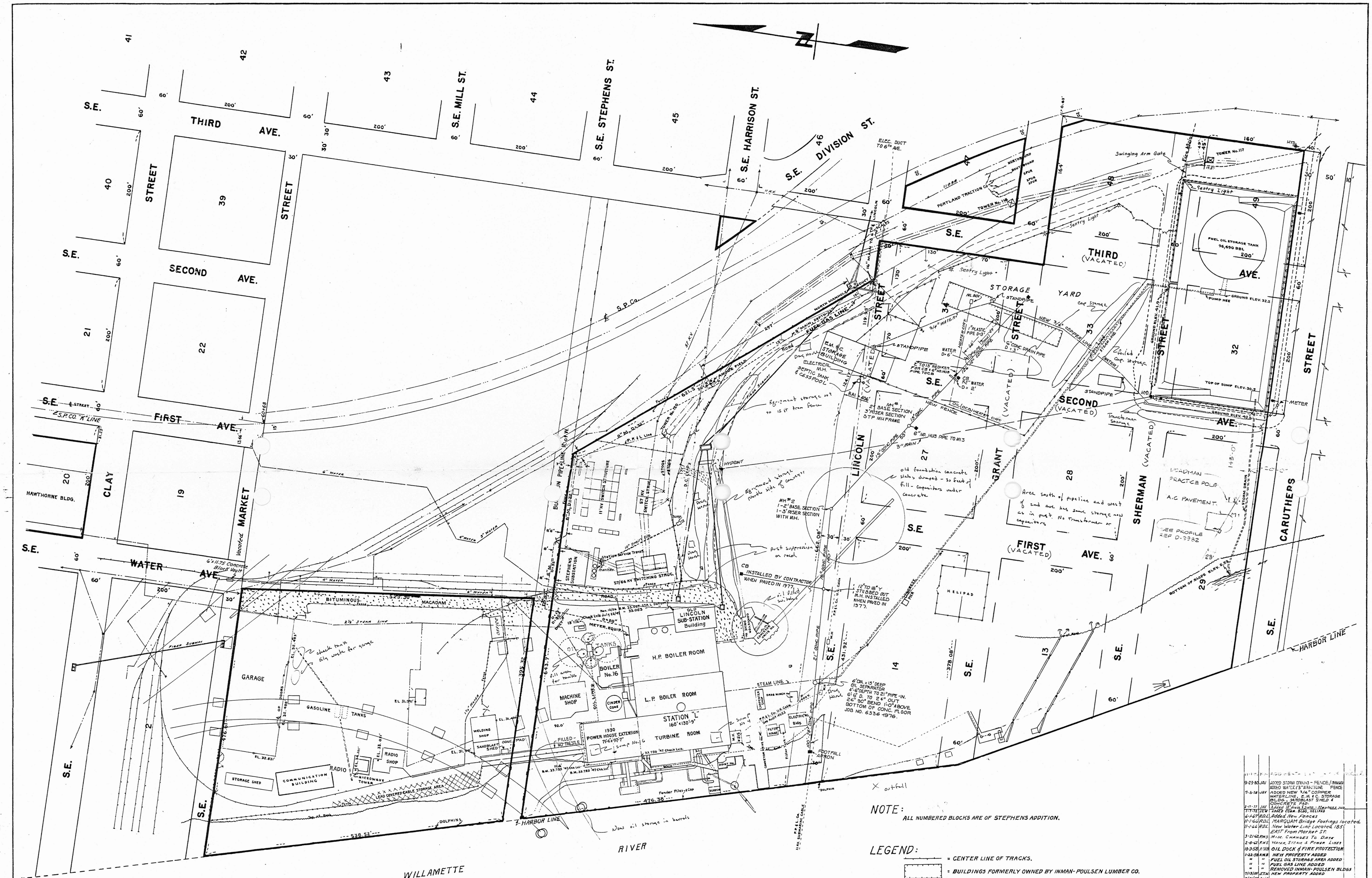
13. Oily waste tank for the garage.

14. Hoist (drag) house location on the conveyor line.

15. Various other hoist (drag) house locations.

The meeting was adjourned at 1:45 p.m.

CS/5sh
0004x.0487



NOTE: ALL NUMBERED BLOCKS ARE OF STEPHENS ADDITION.

LEGEND:

- = CENTER LINE OF TRACKS.
- = BUILDINGS FORMERLY OWNED BY INMAN-POULSEN LUMBER CO.
- = BOUNDARIES of P.G.E. Co. OWNED PROPERTY.
- = MARQUAM BRIDGE FOOTINGS

Comments added 4-1-87

REFERENCE DR'W'G'S.

CE 5300 STA. 'L' FUEL OIL STORAGE DOCK PILING & DOLPHIN PLAN
DE 3453 " " " " " TANKER MOORING FACILITIES
D 9982 STATION 'L' MOORING BLOCK DETAILS

CE 5042 STA. 'L' FUEL OIL STORAGE AREA GRADING & DRAINAGE PLAN
CE 5250 " " " " " PIPING PLAN & PROFILE
CE 5029 " " " " " GENERAL LAYOUT
DE 3437 " " " " " STORM DRAIN PROFILE
DE 3269 " " " " " FIRE PROTECTION WATER SUPPLY

P.G.E. Co. PROPERTY PLATS D11-3/1, D11-3/2, D11-3/3.
CB 345 = STATION 'L' GENERAL MAP OF PROPERTY.
CE 3500 = MARKET ST. GARAGE - STATION 'L' & VICINITY.
CE 4218 = STA. 'L' 57-66KV GEN. ARRANGEMENT.
CU 52, Sheet 130 = SUBWAY PLATE MAP STA. 'L'.
CE 4216 = REBUILD DOCK & FENDER PILES STA. 'L'.

DATE	BY	DESCRIPTION
9-23-80	JAV	ADDED STORM DRAINS - FENCE / CHANGED ADDED WATER (3" MAIN) LINE FENCE
7-6-78	JAV	ADDED NEW 3/4" COPPER WATERLINE, E.M. & C. STORAGE BLDG., SANDBLAST SHED & CONCRETE PAD.
2-17-77	JAV	Added 10" drain & Sump - Stephens sub
1-7-72	JEW	ADDED COMM. BLDG, HELIPAD
6-1-67	RDL	Added New Fences
11-1-66	RDL	MARQUAM Bridge Footings located
11-1-66	RDL	New Water Line Located 185' EAST From Market St.
3-21-62	RWS	Misc. Changes To Date
2-8-62	RWS	Water, Steam & Power Lines
10-3-58	AWB	OIL DOCK & FIRE PROTECTION
1-22-58	A.W.B.	NEW PROPERTY ADDED
"	"	FUEL OIL STORAGE AREA ADDED
"	"	FUEL GAS LINE ADDED
"	"	REMOVED INMAN-POULSEN BLDGS
7/13/55	J.T.H.	NEW PROPERTY ADDED
3/31/55	A.W.B.	

REVISIONS

PORTLAND GENERAL ELECTRIC CO.
PORTLAND, OREGON

STATION "L"
GENERAL MAP of PROPERTY AND VICINITY

SCALE 1" = 60' DATE 2-18-55
DRAWN BY A.W.B. TRACED BY A.W.B.
CHECKED BY
APPROVED C.G.P.
APPROVED
DRWG. NO. CB 380

MEMORANDUM

TO: F.H. LAMOUREAUX

FROM: F.D. MCCAIG

DATE: MAY 27,1987

SUBJECT: STATION L PCB's

This memo claries some information received from retired PGE employees regarding possible PCB contamination of the Station L property. At your request I talked to Larry Manning, Dick Tucker, Harry Randall, Lee Sherban, and Bud Catto about when PCB capacitors may have been buried in the L yard and how they might have gotten there.

Before PGE bought the property from Inman-Polsen in 1956, it had been used solely for the sawmill operation. Station L was burning the sawdust. There was no PGE equipment stored in the yard until the Inman-Polsen buildings were torn down in 1956. There was also no creek running through the property, but the entire area was a marshy backwater of the Willamette. Therefore anything buried initially would now be under some 20 feet of fill.

From 1956 to 1964 large amounts of fill were brought in from the downtown underground construction program. The fill consisted of mostly dirt and cobblestones. From 1964 to 1970 smaller amounts of this fill were brought in.

At about the same time some capacitors were brought in from the

distribution system and were presumably buried. The first capacitors had been bought in about 1950. These were 15 KVAR and were quickly superseded by larger sizes. All these capacitors were probably PCB-filled. Only one retiree remembers seeing the capacitors that may have been buried. Of the remainder, two had little involvement in the yard until much later. The other two would presumably recall the capacitors if a large number were involved.

FDM

c: G.L. NORMINE

D. M. NORTON

ES-871-87M
GEN ~~GOV REL 10~~
A/S 7

MEMORANDUM

TO: File

FROM: Dennis Norton

DATE: September 8, 1987

SUBJECT: Station L Fill Operations

On August 5, 1987 Rick Hess and Dennis Norton met with Jim Graiff, PGE bulldozer operator. The purpose was to discuss filling operations at the Station L site. We reviewed the 1966 aerial photograph of the Station L property which shows the area where PGE filled in the bank of the river (approximately at the end of Grant Street). Jim Graiff said that when the conveyor building was taken down a 25 ft hole was left in which all of the concrete materials from the conveyor building, plus additional material was disposed of. These materials included broken cement and conduit, but mostly dirt.

In filling the property along the river, the area just north of the fill area was used for staging and then this material would be bulldozed over the side of the bank. The fill material included cement, blacktop, dirt, conduit, and some tires. We asked Jim if there had ever been any capacitors included in this fill material. He said that there were none in the fill material, and if there were any he would have seen them.

DMN:slc

c: Jim Graiff
Fred Lamoureaux
George Normine
Rick Hess
Lavinia Wihtol

c: 1186

ES-352-89M
GEN A/S 7
STATION L

To Dennis Norton

From Lolita Carter lmc

Date August 31, 1989

Subject Barrels at Station L

As per your request, all the barrels at or on Station L property have been identified and arrangements made for disposal based on the contents of the barrel:

1. Empty barrels which had contained water and "antifreeze" from the basement of Station L are being taken for scrap metal by Matheny Metals under the direction of Daryl Irwin. Some dry, empty barrels from the Station L property were added so that at last count there were 280 barrels in this group. Daryl Irwin is to be responsible for these barrels.

   Daryl Irwin also is responsible for the two pallets of lead-acid batteries. He is going to send them for reclamation. If reclaimed, they are not a hazardous waste.

2. Three barrels of contaminated water were sent to Sol-Pro, Inc as Non-Regulated Waste. These barrels were from those overpacked and sampled by OMNI in February 1989.

3. Twenty four 5-gallon pails of latex paint were taken by Sol-Pro for beneficial reuse. This paint had been discarded by Trojan, sold by Investment recovery and never picked up by the purchaser. These were shipped on a Bill of Lading since they were not a waste.

4. Five barrels of waste sludge from the "anti-freeze" and water disposal were taken by Sol-Pro as Non-Regulated Waste under PO 2186-003. Also under this release letter (003) one drum of hazardous waste combustible liquid was taken to Sol-Pro. This single drum was part of the group overpacked and sampled by OMNI in February. All other wastes from Station L are to be charged to PO 2186-004 to be part of the Station L Clean-Up costs.

5. Four drums of corrosive solid (sodium sulfite and soda ash, NaOH) and one drum of corrosive liquid were taken by Sol-Pro to Environmental Pacific in Amity Or. Sol-Pro cannot accept corrosives for final disposal at their facility in Tacoma. The corrosive liquid was from Station L. The corrosive solids were part of the material from Trojan, sold and not picked up by the purchaser. This material had to be packaged in overpack or regular drums because the sunlight had destroyed the original packaging.

6. Sixteen 4-gallon packages of waste paint were taken by Sol-Pro on a pallet. Each package was labeled as hazardous waste by Sol-Pro. The original flammable label was still attached to the package. This paint was also part of the Trojan material.

7. Forty-three barrels of hazardous waste liquid (7 barrels), waste flammable liquid (13 barrels), waste fuel oil (7 barrels), waste oil (15 barrels), or waste combustible liquid (1 barrels) were also taken by Sol-Pro. This material was from draining a fuel line at Station L, from Trojan, from drums overpacked by OMNI, or from parts unknown but on-site. None of this material contained PCBs.

8. PGE Recycling and Trucking is to manage any drums with PCBs or usable materials. Mark Sloan is to remove this material from Station L by September 1, 1989 if the line crew will release their truck for his use. He is to get management support if needed to obtain the use of the truck. Included are these barrels:

    1 partial drum (dm) floor dry
    1 dm clothing from the OMNI sampling in February
    1 dm machine oil, 180 ppm PCB, from Station L
    5 dm transformer oil, PCB 5 to 23 ppm, from various areas
    2 dm sandblast material from refurbishing skid tanks from CSC
    1 dm used oil and absorbent containing solvent from refurbishing skid tanks from CSC
    1 dm Templex soap which is to go to Fleet Maintenance at Tigard

9. Three drums were left against the south side of the OMSI blue building. One drum was water and rags, one drum was floor dry and the OMSI employee asked for the third to purge and clean his boat motor.

10 Four drums were left inside the fence where the asbestos removal is occurring. These drums were either in use or contained scrap metal.

11 Three drums full of scrap metal were left, one at the storage shed and two in the area of the insulators. These are in use by Daryl Irwin.

12 Any barrels now in use by the line crews were not removed. This included the bottomless barrels used in pole setting.

This should account for all the hazardous materials or wastes and empty barrels that are or were on site at Station L as of August 30, 1989.

RECOMMENDATIONS;

* The sign at the entrance to Station L which says, PGE VEHICLE DISPOSAL AREA should have the word --Disposal-- removed.

* *The fence along the west side of the "Burma Road" (alleyway along SE Third and Lincoln Sts.) should be completed so that access to the area where storage or disposal has occurred is curtailed.*

* *Signs should be placed on the fences prohibiting the storage or disposal of materials on Station L properties.*

* *Information on the proper storage and disposal of barrels (ES-337-89M) has been sent to PGE management and employees who work with barrels so that they can assist in properly identifying and moving barrels. Follow up training and management support would be helpful.*

If you need additional information, please contact me.

cc Steve Anderson
Jeddy Beasley
Rick Hess
Daryl Irwin
Duncan McCaig
Mark Sloan

"Imagineering A Cleaner World"

RIEDEL ENVIRONMENTAL SERVICES, INC.

Portland Region:
P.O. Box 03096
Portland, Oregon 97203-0096
(503) 286-4656
FAX: (503) 283-9703

June 27, 1990

Dr. Lolita Carter
Environmental Sciences
Portland General Electric
121 S.W. Salmon Street
Portland, Oregon 97204

Dear Dr. Carter:

As requested, enclosed is a summary of activities involving Riedel Environmental Services tank cleaning project at Portland General Electric (PGE) Station "L" property from February to April 1990.

As you are aware, several problems arose beyond our immediate control which caused the project to be extended by several weeks. Hopefully, this summary will simplify the events which took place and explain many of the problems encountered. In addition, I hope that the information provided is sufficient documentation to support the change orders needed for payment to Riedel Environmental Services, Inc. (RES) for the work performed at the site.

If you have any further questions, please contact me at 286-4656, extension 227.

Sincerely,

Eric F. Heinitz
Project Manager

EH/ko

Ref:PGE-RPT
Job 2511

Final Summary of Station "L"
Tank Cleaning Project
For Portland General Electric

Scope of Work

Pump out approximately 6,000 gallons of diesel oil, Bunker C oil and sludge, contaminated with less than 15 parts per million (ppm) of Polychlorinated Biphenyl (PCBs) and transport to a pre-determined disposal facility approved for handling the disposal of PCB contaminated materials. Clean the inside of the tank utilizing high pressure/low volume steam cleaners and sample inner walls to determine if any PCBs remain.

Site Description

Portland General Electric (PGE) Station "L" property is located on Water Street adjacent to the Willamette River in Portland, Oregon. A portion of this site was donated to the Oregon Museum of Science and Industry (OMSI) for the construction of OMSI's future museum. Four (4) underground storage tanks (UST's), UT-1 (west tank), UT-2 (east tank), EY-03 (north tank), and EY-04 (south tank), exist on the site which must be cleaned and filled prior to proceeding with the site construction. Two pump houses were also on site, one located in the center between all four tanks and the other located to the east of Tank UT-2. Tanks UT-1, EY-03, and EY-04 were previous cleaned and inspected by PGE. Tank UT-2 was the only tank Riedel Environmental Services, Inc. (RES) was contracted by PGE to clean.

Summary of Events

On February 27, 1990 RES began removing the product (diesel oil, Bunker C oil and sludge) from the underground storage Tank UT-2 located at Station "L". Ullage readings taken of the tank on three separate occasions by RES indicated the quantity to be between 4,000 and 6,000 gallons of product. The diesel and Bunker C oil were on top of what the ullage reading indicated to be an approximate one foot layer of sludge. The diesel and bunker C oil pumped out easily in approximately one hour, leaving only the layer of sludge on the bottom of the tank. The consistency of the sludge was similar to axle grease. Over the next several hours, RES attempted to remove the sludge with their vacuum truck. However, since this material would not flow, even at a moderate

rate, the vacuum truck was unable to remove it in a timely cost effective way. By the end of the day, the vacuum truck was three-quarters full and departed to Western Compliance Services, Inc. (Wescomp) to offload. Off-loading the vacuum truck proved as difficult as loading it and required an entire day to do so. Additional samples were required by Wescomp to confirm the low PCB levels and these samples showed levels less that 2 parts per million (ppm). Due to prior commitments, no work was scheduled to resume on Tank UT-2 until March 6, 1990.

On March 1, RES personnel were contacted by Allied Demolition and OMSI to investigate an oil spill at Station "L" believed to be related to the tanks RES was cleaning operation. Harold Zarling and two other RES personnel responded to the call. Mr. Zarling's investigation concluded that Allied Demolition had probably broken an underground water main and possibly another underground pipe containing oil. It is believed that this water and oil had leaked into the basements of the two pump houses directly adjacent to underground storage Tanks UT-2, EY-03 and EY-04. Although Mr. Zarling had obtained samples of the oil. No action was taken since all the spilled material was confined within the basement areas and did not pose any environmental problems. RES contacted PGE. PGE decided that the spilled oil could be removed easily as soon as RES resumed cleaning Tank UT-2. Allied Demolition continued to work and remove the remaining debris in the area.

On March 7, RES began to pump out the sludge in the UT-2 tank using Power Master "Super Sucker" trucks. However, these trucks pumped large amounts of water from the tank and had to decant off the water several times in order to continue pumping out the sludge. Due to the thickness of the sludge, the vacuum trucks would only suck a hole in this material and pull the water from underneath. At the end of the day, only two truck-loads (totalling approximately 6,000 gallons of oily water) were removed from the tank without any noticeable drop in the product level in the tank. The material removed from the tanks was disposed of at Wescomp.

Ron Parr, PGE Facility Inspector, visited the site to discuss with RES where the water in tank UT-2 originated. Tanks EY-03 and EY-04 also contained large quantities of water. Both tanks had been previously cleaned and inspected by PGE and were dry prior to February 27, when RES began cleaning Tank UT-2. It was believed that the water flowed into these three tanks from the water main that was broken on March 1, 1990.

During the week of March 12, Envirex and Allied Demolition removed the tops from tanks UT-1, EY-03, and EY-04. Although Tank UT-1 was dry, Tanks EY-03 and EY-04 were approximately half full of water.

RES transported a 6,000 gallon poly tank to the Station "L" site to use as a holding tank for the water pumped from Tank UT-2. This would allow RES to finish removing the sludge and clean the tank so OMSI could then fill it and continue with the construction work. The water remaining in the poly

tank would be properly disposed of at a later date. On March 19, RES began to pump the water from Tank UT-2. Four thousand gallons of water were removed from this tank and the level in the tank had still not dropped. However, water levels in Tanks EY-03 and EY-04 had dropped slightly which made it apparent that the three tanks must be cross-connected allowing a free flow of liquids between them. By pumping the water from UT-2, Tanks EY-03 & EY-04 were also being dewatered. RES contacted PGE to discuss this problem. It was suggested by RES that all Riedel work at the site be stopped until the water problem was investigated and solved. PGE concurred that the work stop since they should not be responsible for the disposal of the water from Tanks EY-03 and EY-04. A few days later, with the approval of RES, Envirex removed the top from Tank UT-2. The water level in all three tanks was the same, further confirming that a connection existed between the three tanks.

On March 28, OMSI contracted RES to dewater Tanks EY-03 and EY-04 under a special permit from Oregon Department of Environmental Quality (DEQ) to discharge directly into the Willamette River. In order to prevent any oil from flowing out of UT-2 into EY-03 and EY-04 during the dewatering, all three tanks were pumped out simultaneously.

Once the water was completely removed from UT-2, the depth of the sludge was measured at four feet. This amount was significantly more than originally believed. This error occurred because the density of sludge prevented the weight used to take the initial ullage readings from penetrating through to the bottom of the tank, resulting in a false depth reading.

With the water removed, the sludge was easily pumped out and the tank was cleaned and sampled for PCB's. All sample results were negative. The sludge from UT-2 was disposed of at St. John's Landfill under Permit No. 2299.

MAR 1 4 1994
D. M. NORTON

ES- 142 -94
ENV 11

MEMORANDUM

TO: File

FROM: T. N. Moore

DATE: March 11, 1994

SUBJECT: Drum Disposal

Previous activities at Station L generated nine 55 gallon drums of water. This water was thought to be contaminated with asbestos and PCB's. A Waste Profile (#BB8009) was established with Chemical Waste Management for the disposal of this water. Chemical analysis of the water indicated the absence of asbestos, PCB's and regulated solvents. The water is not a hazardous waste. The nine drums contain water and dirt. Disposal is as follows:

1. The 9 drums will be disposed of at the Station L Tank Farm Bermed area.

2. When part of the Bermed area (where the dismantled tank was located) is dry, the contents of the drums will be dumped in the dried area.

3. The empty drums will be taken from Station L to PSC for disposal.

Copies of Waste Profile #BB8009 and analytical results from OAL are attached to document the classification of the water as non-hazardous.

I will work with representatives from PSC to assist in the dumping of the drums into a dry section of the Bermed area.

Enclosures

cc Lolita Carter
Dennis Norton w/o
Mark Sloan w/o
Dan Okrasinski w/o
Wayne Lei w/o

Portland General Electric Company

May 4, 1995
ES-235-95
ENV 10 - Station L

Mr. Rod McDowell
Oregon Museum of Science and Industry
1945 SW Water Ave
Portland OR 97214-3354

Dear Mr. McDowell:

Subject: Station L Docking Facility Removal

Portland General Electric Company has completed the specification to remove the dock at Station L. The specifications for the removal will be going out for bid in May and work is expected to commence in July. The Army Corps of Engineers has restricted the dock removal to the period between July 1 and October 15, 1995.

I have included a copy of the specification for your information. I will keep you informed of our progress on this matter.

If you have any questions please call me at 464-8524.

Sincerely,

Jayne Allen

Jayne Allen
PGE Environmental Specialist

Attachment

c: Dennis Norton

dockremv.ltr

MEMORANDUM

TO: Tia Mitchell

FROM: William E. Lawson WEL

DATE: March 30,1995

SUBJECT: STATION L DOCKING FACILITY REMOVAL

Attached are 5 sets of drawings, Technical Specifications, and attachments for your action to request bids to qualified bidders to remove the docking facility at Station L. Also, attached is a copy of a memorandum from Environmental Services showing job number for this project and recommended bidders. The Project Coordinator for this job is Jim Kloch of Western Region. Technical review of bid proposals shall be performed by Delivery System Planning & Engineering Department prior to bid award. Please note that documentation per Technical Specifications is essential to meet regulatory requirements.

We have already obtained the permits from the Portland District Corps of Engineers and the State of Oregon Division of State Lands. The work shall be performed during the period between July 1,1995 and October 15,1995.

Please refer all technical questions to me at 464-8030 or to Frank Irlandez at 464-8037.

Attachments

c: Gary Lindland, w/o attach.
Dennis Norton, w/o attach.
Lolita Carter, w/o attach.
Joe McArthur, w/o attach.
Dave Vanbossuyt, w/o attach.
Bruce Carroll, w/o attach.
Jayne Allen, w/attach.
Jim Kloch, w/attach.
✓ Frank Irlandez, w/attach.

ES-153-95

MEMORANDUM

To: William Lawson

From: Jayne Allen JMA

Date: March 14, 1995

Subject: Station L Pier Demolition

I have seen and reviewed the bid specification and drawings for demolition of the Pier located at Station L. Everything looks fine and I would like the package to go out for bid.

The job number for the demolition is 181 N34291 49 841 R0002 CFUND.

I would like to see the following companies given the opportunity to bid:

Advanced American Diving
Devine Dutra Diving and Construction
Fred Devine Diving and Salvage
O'Sullivan Omega

Thanks. Let me know if you need anything else.

cc: Dennis Norton

Rev.	Date	Initials
0	1/13/95	WEJ/JKS
1	3/30/95	WEJ/JKS

TECHNICAL SPECIFICATIONS

DOCKING FACILITY REMOVAL

STATION "L"

PORTLAND GENERAL ELECTRIC COMPANY

Prepared by J K Sandy

Reviewed by Lolita Carter

Approved by William E. Jawson

TECHNICAL SPECIFICATIONS

DOCKING FACILITY REMOVAL

STATION "L"

1.0 General

1.1 Work Scope:

The Contractor shall furnish all labor, equipment, superintendence to remove and dispose of offsite existing pipings and fittings for oil supply and for fire protection and all wooden support structures and pilings located in the northwest corner of the PGE Station "L" pole yard along the Willamette River. All dolphins shall remain in place. Also, included in the work scope is the cleanup and disposal of all debris accumulated around the pilings and dolphins in the work area.

1.2 Job Site:

The job is located in the northwest corner of the Station "L" pole yard along the Willamette River south of the OMSI property line.

1.3 Codes, Rules, and Regulations:

The Contractor's workmanship and disposal of removed materials shall comply with the OR-OSHA and EPA/DEQ rules and regulations of the State of Oregon Division of State Lands, Multnomah County, City of Portland, and Portland District Corps of Engineers. PGE will apply for Corps of Engineers permit.

1.4 Permits:

The Contractor shall obtain and pay fees for all necessary permits relating to this job except the Corps of Engineers and State of Oregon Division of State Land permits. Also, the Contractor shall comply with the Corps of Engineers permit's general conditions and special conditions. See Section 3.2.1. for other permitting requirements.

1.5 Licenses:

The Contractor shall possess all licenses, permits and certificates necessary to perform the scope of work. Copies of necessary documents shall be submitted with the bid.

1.6 Safety and Security:

It shall be the responsibility of the Contractor to keep the site secure during the course of removal operations. The Contractor shall also, take actions necessary to insure the safety of PGE personnel and others who inspect or visit the job site.

1.7 Unidentified Work Scope:
Any unidentified work required during removal operations shall be included as part of the Contractor's Bid package. Prior to start of any work outside the scope of this project or work identified herein, it shall be reviewed and approved by the PGE Project Engineer. Method of payment for work outside the scope of these Specifications shall be based on hourly labor rate and cost for materials, equipment, and overhead.

1.8 Drawings:
The work shall be performed as shown on the following drawings and as indicated in these specifications:

Drawing No.	Title	Rev./Date
CE-5299	Fuel Oil Storage Dock and Walkway	2/5-27-58
CE-5300	Fuel Oil Storage Dock Piling & Dolphin	2/1-8-69

1.9 Attachments:
Permit from State of Oregon Division of State Lands, February 17,1995.
Permit from Portland District Corps of Engineers, March 27,1995.

2.0 MATERIALS TO BE REMOVED

The following is a partial list of materials to be removed as shown on the drawings. Removal of floating debris on the water are made part of this job. A site visit will be required to determine the type and quantity debris to be removed. All other material to be removed as required by these specifications, shall be per appropriate codes, regulations, and permits.

2.1 Debris:
The debris consists of logs, tree limbs, twigs, floating vehicle tires, and part of the old dock platform that have been washed out from upstream locations. The debris are blocked by a log boom underneath the walkway piling.

2.2 Fire Protection Piping and Fittings:
The piping is an 8" diameter steel pipe with pumper headers. Total pipe length is approximately 120 feet.

2.3 Oil Supply Line:
The piping is a 12" diameter asbestos coated steel pipe with with valves and flanges. Pipe length is approximately 120 feet. The 12" diameter piping, (length unknown) which

appears to be flexible piping as laid down in the walkway shall be removed.

2.4 Pilings and Bracings:
There are 16 treated wood pilings approximately 12" in diameter which extend 30 feet above the waterline and approximately 3-1/2 feet to the river bed from the surface water. Bracings are 4"x10" of miscellaneaous lengths.

2.5 Walkway, Railings, and Metal Gate:
There are 5 bays of walkway made of treated lumber with a a total length of approximately 100 lineal feet and a width of 4 feet. Stringers are 8"x12", planks 4"x12", toeboards 4"x4", and railings 2"x4" with 4"x4" posts. A metal gate of chainlink fence material is located at the eastend of the walkway.

2.6 Dock:
The dock is made of treated lumber and is approximately 16 feet wide x 30 feet long which includes a lower dock and stairs. Caps are 10"x12"; stringers are 8"x12"; planks 4"x12"; toeboards 4"x6"; and railings are 2"x4" with 4"x4" posts. On the upper dock, a metal shed and a steel crane are located.

2.7 Gangplank and Extension to Dolphin No.3:
The gangplank made of treated lumber is approximately 6 feet wide x 11 feet long. Stringers are 8"x12", planks 4"x12", and railings 2"x4" with 4"x4" posts. The extension to Dolphin No.3 is approximately 13 feet long and 3 feet wide. Planks are 3"x12" and railings are 2"x4" with 4"x4" post.

3.0 WORKMANSHIP

3.1 General:
The Contractor shall maintain and keep the work area clean and in a safe condition. All safety equipment, materials, and barricades shall be the responsibility of the Contractor. The work shall be coordinated and supervised by the Contractor. The Contractor shall contact PGE's Project Manager for support, questions, or for engineering clarifications. All work in the project area shall be per OR-OSHA or other code requirements.

3.2 Removal:

3.2.1 Submittal of Documentation and Work Preparation:
The Contractor shall provide and submit to PGE the following documentation prior to material removal and disposal of removed material:

a. Permits, means of shipment of debris and material, and disposal locations.
b. Plans for disposal of separated logs, poles, and pilings that are penta or creosote treated for proper disposal.

c. Verify that the oil pipes are clean and empty of oil products prior to disposal.
e. All steel shall be recycled except asbestos covered steel. No other steel shall be disposed to a landfill.

3.2.2 Debris:
The floating debris and structures shall be removed per these specifications. They shall be identified and separated accordingly for proper disposal.

3.2.3 Fire Protection Piping and Fittings:
All fittings and pump headers shall be removed and piping cut to convenient length for recycle.

3.2.4 Oil Supply Line:
All fittings, valves, and flanges shall be removed. Piping shall be cut to convenient lengths for recycle.

3.2.5 Asbestos Coated Piping:
Some piping may be asbestos coated along its length. Safety precaution shall be implemented during the cutting process. Nonabrasive slings or belts shall be used to avoid damaging the pipe coating during removal. Assistance from PGE Engineering Department shall be obtained regarding procedure in cutting and removal of the asbestos coated piping. Pipe cutting shall be performed in areas where asbestos coating had been removed. Asbestos coated pipe shall be placed on shore as directed by PGE. Disposal of asbestos coated piping shall be PGE's responsibility.

3.2.6 Walkway, Dock, and Gangplank:
Structures for walkway, dock, and gangplank shall be removed in a safe and orderly manner. Materials may be laid down in a PGE designated area for later disposal by the Contractor.

3.2.7 Pilings and Bracings:
Bracings shall be removed prior to piling removal. Pilings and bracings shall be cut at the river bed level.

3.3 Disposal:
It is the responsibility of the Contractor to dispose offsite all materials removed per Section 3.2.1. Disposal of asbestos coated piping shall be PGE's

responsibility.

3.4 Area Restoration:
Onshore area damaged during removal operations shall be restored to its original condition at the cost of the Contractor.

4.0 INSPECTION

The PGE Engineer from time to time will be on-site unannounced to observe the removal operation. The Engineer shall be notified for inspection 24 hours prior, so inspection of work can be scheduled at the following points.

4.1 After all materials are removed and placed in designated area.
4.2 When inspection is required by code and permits.
4.3 Final inspection for acceptance of work.

5.0 DOCUMENTS

Copies of all transportation, chain of custody, and disposal documents shall be submitted to PGE at the end of the project with a summary of this work. Final payment will not be awarded until relevant documents are submitted to PGE.

Oregon

DSL

DIVISION OF
STATE LANDS

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TTY (503) 378-4615

February 17, 1995

Bruce W. Carroll
Portland General Electric Co.
121 SW Salmon St.
Portland, Oregon 97204

RE: RF 9213 Station L redevelopment; Dock removal

Dear Mr. Carroll:

I have received and reviewed the application sent for the dock removal. Thank you for the very complete application which included pictures. It is helpful to have a visual reference to the proposed activity.

There is no further permit or authorization needed by PGE to undertake the dock removal activity. I will keep the application with the approved permit in file RF 9213. This file has the requirement of "riverbank clean-up" which includes removal of unused and abandoned structures along your river front parcel.

Please let me know if you need any further information from the Division.

Very truly yours

Jerry Hedrick
Natural Resource Coordinator
Field Operations

9213A.doc

c: Judy Linton, COE

DEPARTMENT OF THE ARMY
PORTLAND DISTRICT, CORPS OF ENGINEERS
P. O. BOX 2946
PORTLAND, OREGON 97208-2946

Reply to
Attention of:

March 27, 1995

Operations Division

SUBJECT: Permit Application ID No: 95-138 (Willamette River - Removal)

Portland General Electric Company
Attn: Bruce Carroll
121 SW Salmon Street 3WTC-PL
Portland, Oregon 97204

Effective Date: March 27, 1995

Expiration Date: March 31, 1998

Dear Mr. Carroll:

This is in reply to your written request dated February 10, 1995, for a permit to perform work in or affecting navigable waters of the United States.

Pursuant to Section 10 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 403), you are hereby authorized by the Secretary of the Army to remove existing pilings which support an old wooden 16- by 30-foot dock, dolphins and accumulated debris from the river bed. Existing dolphins 1, 2, 3, and 4 (shown on page 3) will remain. This project is located in the Willamette River at River Mile 13.5, in Portland, Multnomah County, Oregon.

Please be aware that this permit does not obviate the need to obtain other Federal, state, or local authorization required by law.

The work is shown on the attached drawings marked 95-138 (Willamette River - Removal), and is subject to the attached General and Special Conditions.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

for Timothy L. Wood
Colonel, U.S. Army
Commanding

Attachments

Permit Conditions:
General Conditions:

1. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 3 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office which may require restoration of the area.

2. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

3. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

4. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

5. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

6. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

7. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

8. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 7 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(Transferee) _____

(Date) _____

SPECIAL CONDITIONS PERMIT ID NO: 95-138 (Willamette River - Removal)

a. All construction debris shall be disposed of in such a manner that it cannot enter the waterway.

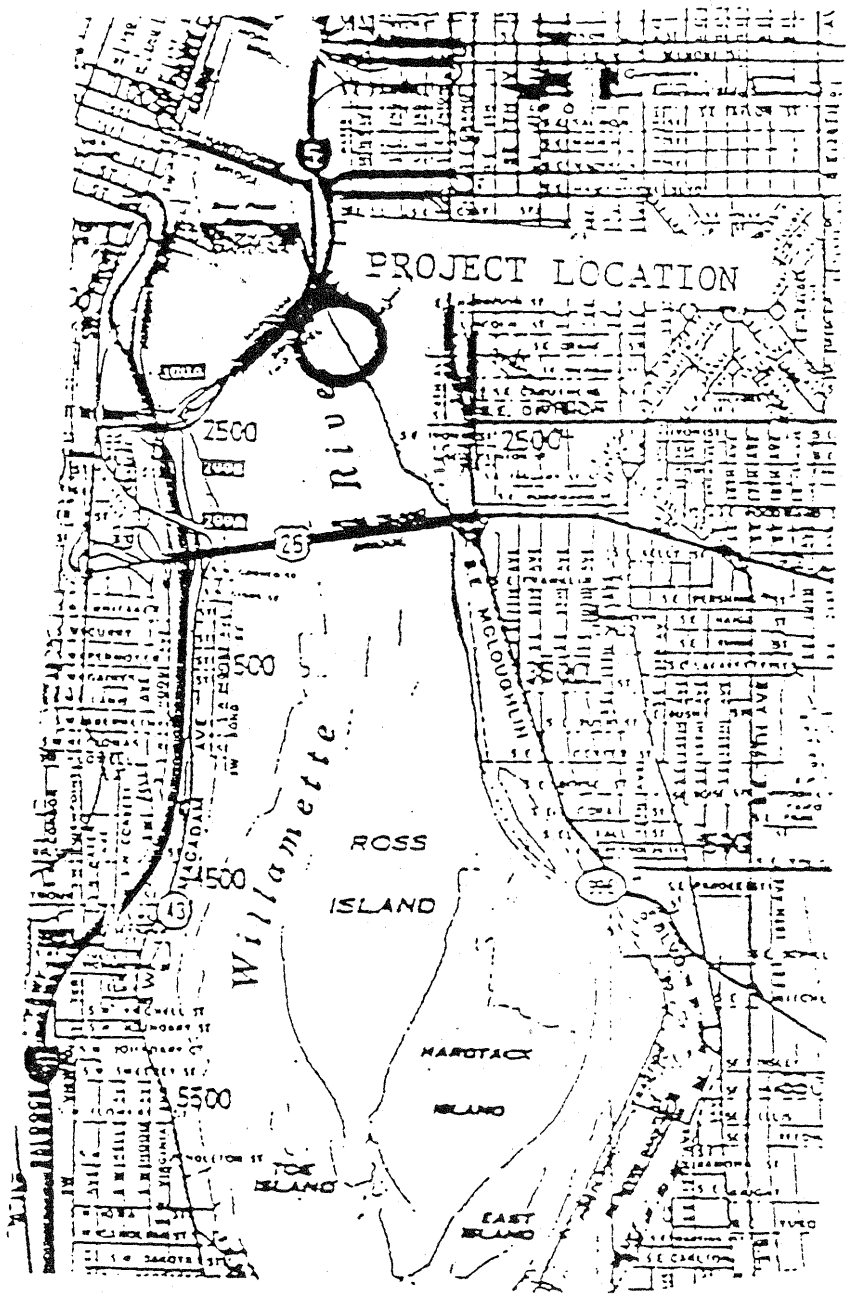
b. All piling and lumber treated with creosote or other protective material shall be completely dry before use in or near the waterway.

c. Care shall be taken to prevent any petroleum products, chemicals, or other deleterious materials from entering the water.

d. Work in the waterway shall be done so as to minimize turbidity increases in the water that tend to degrade water quality and damage aquatic life.

e. All in-water work shall be accomplished in the preferred work period established by the Oregon Department of Fish and Wildlife (ODFW), which is between ~~May 16 through January 31~~ JULY 1 THROUGH OCTOBER 15 for this waterway. If you wish to perform the proposed work outside of that time frame you must contact the local biologist at the ODFW office for Multnomah County (Telephone 567-2041) to ensure your project will not adversely impact migratory fisheries.

95-138 (Willamette River - Removal)



PROJECT LOCATION MAP

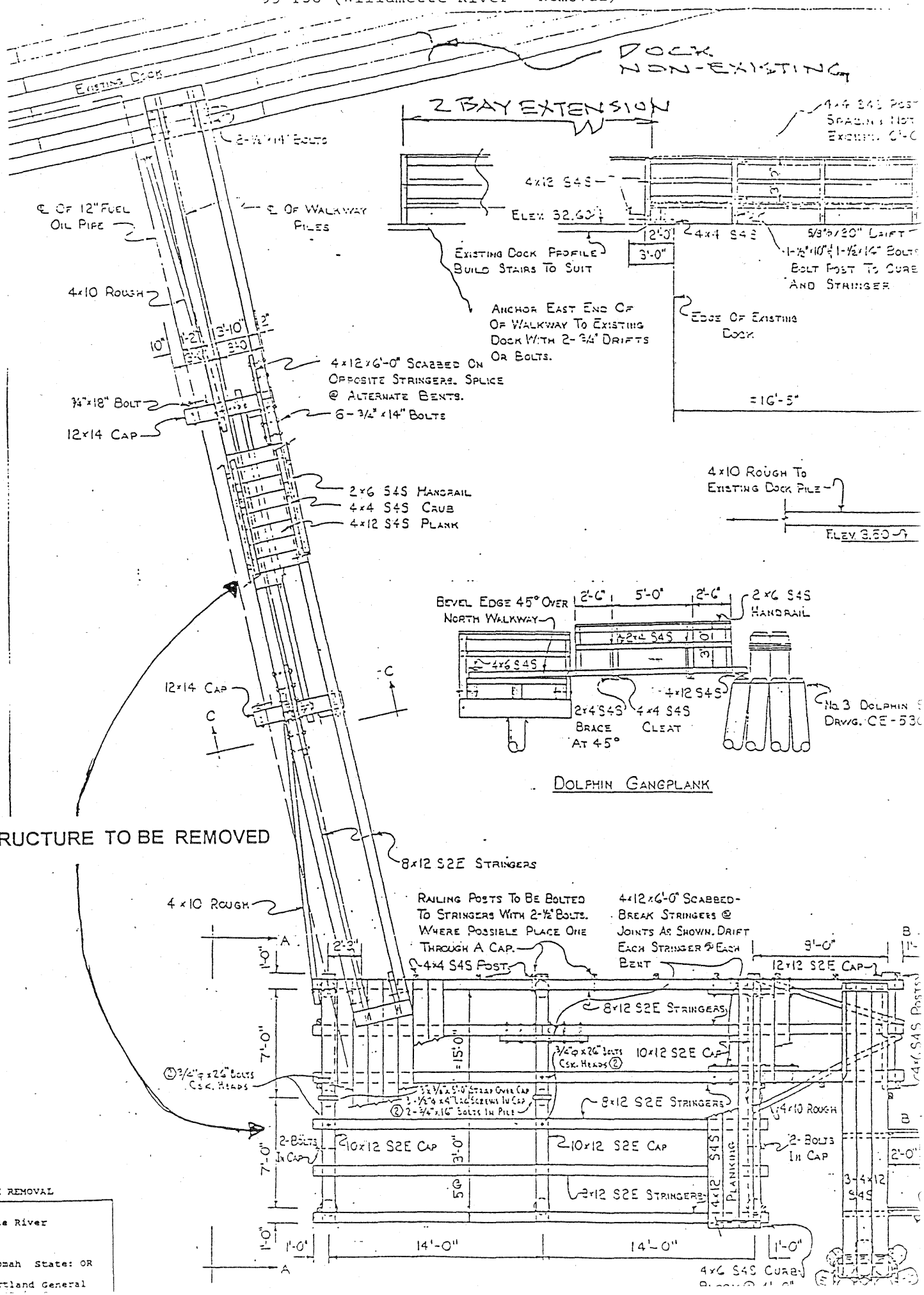
PROPOSED DOCK REMOVAL

1: Willamette River

2: Portland

County: Multnomah State: OR

95-138 (Willamette River - Removal)



PROPOSED DOCK REMOVAL

In: Willamette River

At: Portland

County: Multnomah State: OR

Applicant: Portland General